

Remarks

Claims 18-30 are pending in the subject application and currently before the Examiner for consideration. Applicants gratefully acknowledge the Examiner's indication that claim 19 is objected to but would be allowable if rewritten into independent form to include the limitations of any base and intervening claims. Applicants also gratefully acknowledge the Examiner's indication that claims 24-30 are allowed. Favorable consideration of the pending claims is respectfully requested.

As an initial matter, the Examiner states that the "information disclosure statement filed 6/26/03 fails to comply with 37 CFR 1.98(a)(3)." Specifically, the Examiner indicates that European Patent 0 040 722 A1 (BASF Aktiengesellschaft, 1981) submitted with Applicants' Information Disclosure Statement (IDS) dated June 24, 2003 does not include a concise explanation of the relevance of the patent which is in a non-English language and, therefore, has not been considered. In that IDS, Applicants specifically indicated that European Patent 0 040 722 A1 cited as F1 on Form PTO/SB/08 was written in a foreign language and, therefore, provided an English language abstract which was attached to the front of the patent submitted with the IDS. A copy of Applicants' IDS dated June 24, 2003, along with the English language abstract which was attached to the front of European Patent 0 040 722 A1, is enclosed for the Examiner's convenience. MPEP 609 A(3) specifically indicates that the submission of "an English language abstract of a reference may fulfill the requirement for a concise explanation" of the relevance of the reference. Accordingly, Applicants respectfully request that European Patent 0 040 722 A1 be considered, at least to the extent of the content of the English language abstract of the patent, and made of record by the Examiner the next Action in the subject application.

Claims 18 and 20-23 are rejected under 35 USC §102(b) as anticipated by Kronick *et al.* (1986). The Examiner asserts that the Kronick *et al.* reference teaches a magnetite-dextran particle containing protein A with a specific antibody coupled to the particle. Applicants respectfully traverse this ground of rejection.

Applicants respectfully assert that the Kronick *et al.* reference does not anticipate the claimed invention. Claims 18 and 20-23 of the subject application are directed to gene delivery vectors. Applicants respectfully assert that Kronick *et al.* does not teach or suggest any gene delivery vectors.

The particles of Kronick *et al.* are taught as being useful for magnetophoretic cell separation procedures such as, for example, in isolating specific bacteria and viruses. There is no teaching or suggestion in Kronick *et al.* that such particles could be used as gene delivery vectors. In addition, there is no teaching or suggestion in Kronick *et al.* of attaching DNA or other genetic material to the disclosed particles as would be required for such gene delivery.

Further, the gene delivery vectors of claim 18 comprise ferrite particles having a polymeric coating to which a target polypeptide molecule and a nucleic acid binding protein are covalently bound and a nucleic acid is bound to the nucleic acid binding protein. Claim 18 therefore requires the particles comprise a target polypeptide molecule and a nucleic acid binding protein and a nucleic acid. As described at page 8, lines 12-24, of the subject specification, this combination of three components allows the targeting of the particles and the delivery of therapeutic DNA.

As noted by the Examiner, the Kronick *et al.* publication teaches particles to which protein A is covalently coupled, and bound to the protein A are specific antibodies (anti-*Legionella* antibodies). However, there is no teaching or suggestion in Kronick *et al.* to also bind a nucleic acid binding protein and a nucleic acid to such a particle. As the Examiner is aware, in order to anticipate, a single reference must disclose within the four corners of the document each and every element and limitation contained in the rejected claim. *Scripps Clinic & Research Foundation v. Genentech Inc.*, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991). Accordingly, Applicants respectfully assert that claim 18 and claims dependent therefrom are novel over Kronick *et al.* in that the cited publication does not teach each and every element of Applicants' claimed invention.

Applicants also respectfully assert that claim 18 is not obvious over Kronick *et al.* As explained above, Kronick *et al.* discloses particles for use in cell separation procedures and for the isolation of specific bacteria. There is therefore no teaching or suggestion and no motivation for the skilled artisan to modify the particles of Kronick *et al.* for the delivery of therapeutic DNA by adding both a nucleic acid binding protein and a nucleic acid to the particles.


In view of the above remarks, Applicants respectfully assert that claims 18 and 20-23 are not anticipated by, and are not obvious over the disclosure in the Kronick *et al.* publication. Accordingly, reconsideration and withdrawal of the rejection under 35 USC § 102(b) is respectfully requested.

In view of the foregoing remarks, Applicants believe that the currently pending claims are in condition for allowance, and such action is respectfully requested.

The Commissioner is hereby authorized to charge any fees under 37 CFR §§1.16 or 1.17 as required by this paper to Deposit Account No. 19-0065.

Applicants invite the Examiner to call the undersigned if clarification is needed on any of this response, or if the Examiner believes a telephonic interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,



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DRP/sl

Attachment: Copy of Information Disclosure Statement dated June 24, 2003, with a copy of the English language abstract of European Patent 0 040 722 A1.

# COPY


I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:  
Mail Stop RCE, Commissioner for Patents,  
P.O. Box 1450, Alexandria, VA 22313-1450 on

## INFORMATION DISCLOSURE STATEMENT

Examining Group 1635

Docket No. GJE-06FD3

Serial No. 09/971,776

June 24, 2003  


Doran R. Pace, Patent Attorney

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner : Brian Whiteman  
Art Unit : 1635  
Applicants : Aaron Gershon Filler, Andrew Michael Lindsay Lever  
Serial No. : 09/971,776  
Filed : October 4, 2001  
Conf. No. : 3171  
For : Synthetic Transfection Vectors

Mail Stop RCE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

## INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§1.97 AND 1.98

Sir:

In accordance with 37 CFR §1.56, the references listed on the attached form PTO/SB/08 are being brought to the attention of the Examiner for consideration in connection with the examination of the above-identified patent application. Copies of the cited references are enclosed.

The enclosed European Patent 0 040 722 A1 (BASF Aktiengesellschaft, 1981) cited as F1 on the attached PTO/SB/08 is written in a foreign language. However, Applicants note that an English language abstract of European Patent 0 040 722 A1 is attached to the front of the patent submitted with this Information Disclosure Statement.

Applicants respectfully request that the references submitted herewith be made of record and considered in the examination of the subject application.

Applicants respectfully assert that the substantive provisions of 37 CFR §§1.97 and 1.98 are met by the foregoing statement.

Respectfully submitted,



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DRP/dkt

Attachments: Form PTO/SB/08; copy of cited references



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PTO/SB/08A (10-01)  
Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE



<b>Substitute for form 1449A/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	09/971,776
				Filing Date	October 4, 2001
				First Named Inventor	Aaron Gershon Filler
				Art Unit	1635
				Examiner Name	Brian Whiteman
Sheet	1	of	2	Attorney Docket Number	GJE-06FD3

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number - Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	U1	US-			
	U2	US-			
	U3	US-			
	U4	US-			
	U5	US-			
	U6	US-			
	U7	US-			
	U8	US-			
	U9	US-			
	U10	US-			
	U11	US-			
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	U15	US-			
	U16	US-			
	U17	US-			
	U18	US-			
	U19	US-			
	U20	US-			

MAR 09 2004

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
	F1	EP 0 040 722 A1	12/02/1981	BASF Aktiengesellschaft		✓
	F2					
	F3					
	F4					
	F5					
	F6					
	F7					
	F8					
	F9					
	F10					

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

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**Complete if Known**

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Application Number	09/971,776
Filing Date	October 4, 2001
First Named Inventor	Aaron Gershon Filler
Group Art Unit	1635
Examiner Name	Brian Whiteman
Attorney Docket Number	GJE-06FD3

Sheet	2	of	2
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**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	R1	CHEMICAL ABSTRACTS, No. 48280, Columbus, Ohio; KRONICK, P. and GILPIN, R.W. "Use of superparamagnetic particles for isolation of cells," <i>J. Biochem. Biophys. Methods</i> (1986), pp. 254, Volume 104, No. 7.	
	R2	KRONICK, P. and GILPIN, R.W. "Use of superparamagnetic particles for isolation of cells," <i>J. Biochem. Biophys. Methods</i> (1986), pp. 73-80, Volume 12; Elsevier Science Publishers B.V.	
	R3		
	R4		
	R5		
	R6		
	R7		
	R8		
	R9		
	R10		
	R11		
	R12		
	R13		

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Examiner Signature		Date Considered	
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<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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1 - fam ep40722/pn - 1

1 Patent Groups  
\*\* SS 1: Results 1

Doc. 1 on ss 1 using max

1/1 DWPI

**Title**

Lepidocrocite synthesis with low goethite content - by reacting alkali hydroxide and ferrous chloride in aq. soln. contg. chelating agent for ferric ions

**Patent Data**

**Patent Family**

EP-40722 A 19811202 DW1981-50 Ger 17p \* DSR: DE FR GB NL

DE3019764 A 19811203 DW1981-50

EP-40722 B 19830323 DW1983-13 Ger DSR: DE FR GB NL

DE3160128 G 19830428 DW1983-18

Priority n° 1980DE-3019764 19800523

Covered countries 4

Publications count 4

Cited patents DE1061760; DE2735315; EP-749; FR2416869; US4086174; US4176172 I.Jnl.Ref

**Abstract**

**Basic Abstract**

EP-40722 A In the prodn. of synthetic lepidocrocite (I) contg. under 5% alpha-FeO.OH by reacting aq. FeCl<sub>2</sub> soln. (II) with aq. alkali metal hydroxide soln. and simultaneous oxidn. with atmos. O<sub>2</sub>, (II) is treated with 0.05-5 mole-% organic cpd. forming stable chelate complexes with Fe-III ions.

(I) is specified for use as transparent pigment, since its esp. large surface area gives it high colour purity and strength. It is also useful for making ceramic ferrites.

**European Equiv.**

EP-40722 B In the prodn. of synthetic lepidocrocite (I) contg. under 5% alpha-FeO.OH by reacting aq. FeCl<sub>2</sub> soln. (II) with aq. alkali metal hydroxide soln. and simultaneous oxidn. with atmos. O<sub>2</sub>, (II) is treated with 0.05-5 mole-% organic cpd. forming stable chelate complexes with Fe-III ions.

(I) is specified for use as transparent pigment, since its esp. large surface area gives it high colour purity and strength. It is also useful for making ceramic ferrites. (17pp)

**Patentee, Inventor**

Patent assignee (BADI) BASF AG

Inventor(s) RUDOLF P

**IPC**

IPC C01G-049/06 C09C-001/24 H01F-001/11

**Accession Codes**

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**Codes**

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Derwent Classes E31 G01 L03 V02

**Updates Codes**

Basic update code 1981-50

Equiv. update code 1981-50; 1983-13; 1983-18

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